

IN THE CLAIMS:

Claims 1-10. (Cancelled)

11. (Currently amended) A device for thermal sterilization of liquids comprising:

a counterflow heat exchanger including a conduit with a heating section and a cooling section in fluid connection with one another,

a heating source for heating the liquid,

the heating section and the cooling section being spirally arranged around the heating source,

the heating source being generally located in the center of the spiral,

said conduit being constructed of flexible material,

individual windings of conduit lying one on the other and contacting each other, and

a device check valve for allowing liquid flow only in a direction from the heating section to the cooling section.

12. (Cancelled)

13. (Currently amended) A device as set forth in claim 11 wherein the fitting check valve is arranged on the heating section.

14. (Currently amended) A device as set forth in claim 13 wherein the fitting check valve is arranged at the inlet end of the heating section.

15. (Original) A device as set forth in claim 11 wherein the conduit comprises two elastic films welded to one another at their lengthwise edges.

16. (Currently amended) A device as set forth in claim 11 wherein the conduit comprises first, second and third elastic films welded to one other another at their lengthwise edges and wherein the first and second films are separated from each other by the third film.

17. (Original) A device as set forth in claim 11 wherein the conduit comprises two tubular individual conduits arranged one inside the other.

18. (Original) A device as set forth in claim 11 wherein the individual windings of conduit lie in the same plane.

19. (Original) A device as set forth in claims 11 wherein the individual windings of the conduit are arranged in a spherical form.

20. (Original) A device as set forth in claim 11 wherein the conduit is made of a metal film.

21. (Original) A device as set forth in claim 11 wherein the conduit is made of a plastic film.

22. (New) A thermal sterilizer for liquids comprising:  
a counterflow heat exchanger including a conduit with a heating section and a cooling section in fluid connection with one another,  
a heating source for heating the liquid,  
the heating section and the cooling section being spirally arranged around the heating source,  
said conduit being constructed of flexible material.

23. (New) A thermal sterilizer as set forth in claim 22 further comprising a check valve for allowing liquid flow only in a direction from the heating section to the cooling section.

24. (New) A thermal sterilizer as set forth in claim 22 wherein the conduit comprises two elastic films welded to one another at their lengthwise edges.

25. (New) A thermal sterilizer device as set forth in claim 11 wherein the conduit comprises first, second and third elastic films welded to one another at their lengthwise edges and wherein the first and second films are separated from each other by the third film.

26. (New) A thermal sterilizer as set forth in claim 22 wherein the conduit comprises two tubular individual conduits arranged coaxially one inside the other.

27. (New) A thermal sterilizer as set forth in claim 22 wherein the individual windings of conduit lie in the same plane.

28. (New) A thermal sterilizer as set forth in claims 22 wherein the individual windings of the conduit are arranged in a spherical form.

29. (New) A thermal sterilizer as set forth in claim 22 wherein the conduit is made of a metal film.

30. (New) A thermal sterilizer as set forth in claim 22 wherein the conduit is made of a plastic film.